

## **High $T_c$ Superconductivity in copper oxides - from retrospective to outlook**

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The centennial of the discovery of superconductivity coincides with the 25th anniversary of the discovery of high- $T_c$  superconductivity. In retrospective the guiding ideas and decisive circumstances will be described which in January 1986 lead to the discovery of the new cuprate superconductors. A less than one year, time was left for the Zurich team to test different  $\text{La}_2\text{CuO}_2$  based compounds, to confirm the Meissner Effect and to study flux trapping in the new materials. It was also the time where the news of the discovery started to spread out and experienced mixed reactions were obtained ranging from silent skepticism to polite (cautious) congratulations. This changed dramatically to excitement with the confirmation of the Zurich results by research teams in Japan, China and USA and culminated with the take-off of the new field at the famous "Woodstock Meeting of Physics" after the discovery of the 90K superconductor. Today- after 25 Years the field is ready to present a broad spectrum of large-scale applications. Some have been envisaged already since the early days of superconductivity. However, only with the new cuprate superconductors does it now become possible - after one century - to finally realize these ideas. Large-scale applications will however have to overcome the usual problems of a new technology - but superconductivity will definitively become a key technology for the 21st century.